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ORSYTH DENTAL INFIRMARY

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## TENTATIVE PLANS

OF THE

## Forsyth Dental Infirmary

TO BE ESTABLISHED

IN MEMORY OF

JAMES BENNETT FORSYTH

AND

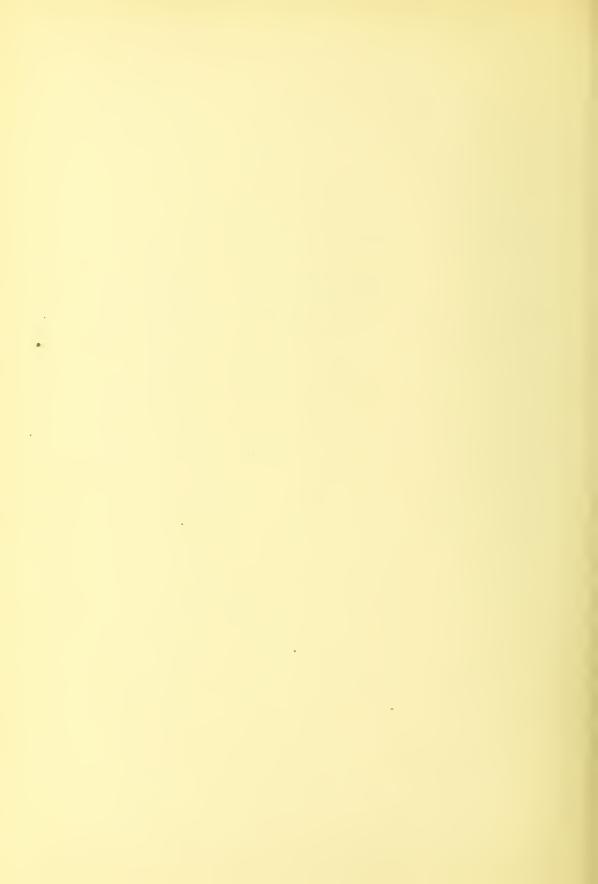
GEORGE HENRY FORSYTH



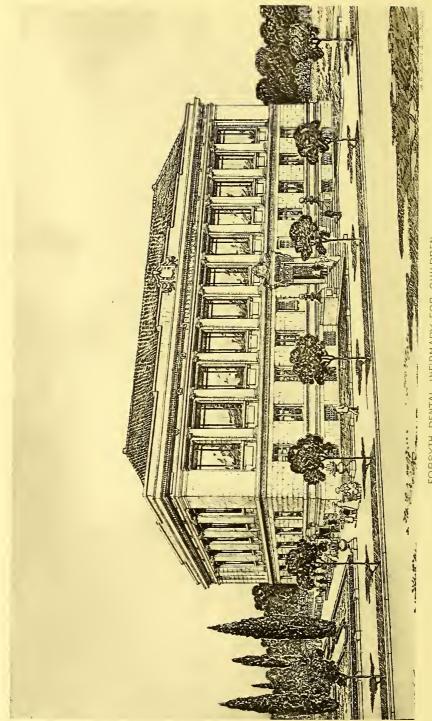












FORSYTH DENTAL INFIRMARY FOR CHILDREN

FRONT VIEW

# The Forsyth Dental Infirmary for Children

422D

## INTRODUCTION

THE FORSYTH DENTAL INFIRMARY FOR CHILDREN was founded by John Hamilton and Thomas Alexander Forsyth in memory of their brothers, James Bennett and George Henry Forsyth. It was incorporated in Boston in 1910 by a special act of the Massachusetts Legislature. The incorporators were Thomas Alexander Forsyth, Frederick W. Hamilton, Edward W. Branigan, Harold Williams, John T. Dowsley, Sumner Robinson, Ervin A. Johnson, Chester B. Humphrey, and Timothy Leary.

A tract of land has been purchased (see Location), and a building will be erected by the Messrs. Forsyth and conveyed in trust to the Foundation. In addition an endowment of about one million dollars will be provided for the maintenance of the new institution.

Diagrams of floor plans of the proposed building were submitted in competition to four architects. The result of this competition was a unanimous award to Edward T. P. Graham, whose plans, somewhat modified, are illustrated in this publication.

## TO THE DENTAL PROFESSION

THE watchword of modern medicine is prophylaxis.

It is therefore with confidence in your willingness to aid us that we are inviting you to assist by your criticism and cooperation in making the project which is outlined in this booklet the most successful effort in prophylaxis which the world has known.

The campaign of education which has been waged for prophylaxis in dentistry has taught the public something of the value of conservation of the teeth. Among the well-to-do, practical progress in conservation has been made possible through

## INTRODUCTION

the employment of dentists to exercise constant oversight of the developing teeth of the children, and to use measures to prevent the occurrence of decay, or to control it on its appearance. Among those who are not well-to-do, the opinion prevails that the primary teeth, being temporary affairs at best, are not entitled to the expert care which they, often grudgingly, provide for the permanent teeth.

It is unnecessary to remind the dental profession of the important influence which the temporary teeth exert on the development of the jaws and, more, on the development of the face and body, as a whole. It is unnecessary to more than mention the desirability of the early application of corrective measures in the form of orthodontia for the regulation of the

growing teeth.

This institution will be devoted to the care of children's teeth. It will offer opportunity to all deserving children under the age of sixteen to obtain freely expert advice and care for their teeth. Housed in an adequate building with a central situation and supplied with every facility for efficient work, it is hoped that its influence will be widespread.

Apart from the actual work on mouths, it is expected to furnish valuable practical teaching in oral hygiene. Just as the sanatoria for the cure of tuberculosis have served as centres for the dissemination of wisdom concerning personal hygiene by the example and teaching of their patients, so it is expected that this institution will promote public education in not only oral, but also general hygiene.

It will be noted that no provision is made for artificial work. It is felt by the trustees that the well-equipped laboratories of the Dental Schools can supply the demands in this respect of that portion of the public which cannot pay for dental service. The children's problem has little to do with artificial work, and their needs cannot be cared for by the infirmaries of the schools. The number of children requiring dental oversight in the Boston public schools alone is so great that the dental school

## INTRODUCTION

clinics are overcrowded in attempting to look after but a small portion of the more extreme cases.

Again, the children are not welcomed in too great numbers in the school clinics. Apart from orthodontia, the problems which children's mouths present are relatively simple ones from the standpoint of technical dentistry. The Dental Schools very properly desire to give their students a special training in the more complex problems met with in the adult mouth. The income of the practising dentist, with few exceptions, is derived almost wholly from patients above the age limit set by this institution. It is to be expected, however, that with the growth of public knowledge of the importance of oral prophylaxis in the early years of life, which will necessarily follow the establishment of this institution, a new field in dentistry will be opened, not for the few specialists who are now doing this work, but for the profession at large.

Provision has been made for research. A research fellowship has been established and is now held by a man selected for his fitness. The laboratory will be so equipped as to offer opportunity under expert supervision for special work in research by men who desire to do this work.

The museum of the institution, it is hoped, will be a depository for materials of every kind which can be used for the teaching of oral hygiene. The lecture room will be used for the education of the public in dental matters.

Finally, this foundation is not to be looked upon as a charity. The world recognizes the right of children to development mentally at the public expense. The question of their equal right to physical development is now receiving some attention. The acute dental needs of the children have never been fully recognized outside of the profession, their importance has never been acknowledged. It is hoped that this institution will have an influence in making for a better looking, more perfectly developed human race. It is for this we are working and seeking your help.

## THE LOCATION

A TRACT of land numbered 200 on the Fenway, opening on Hemenway Street and containing 51,000 square feet, has been purchased by Thomas A. and John Hamilton Forsyth and conveyed in trust to the uses of the corporation.

This location is one block away from the intersection of Bryant Street and Huntington Avenue, and with the junction of Huntington and Massachusetts avenues a transfer point will be easily accessible by street cars from all portions of Greater Boston.

The land nearest Massachusetts Avenue will be converted into an enclosed Park offering a convenient approach to the Fenway from the end of Bryant Street and will be known as Forsyth Park.

The building will occupy the middle portion of the rest of the Fenway frontage. With its wings it will enclose a sunken garden. Less than one half of the available space for building will be covered by the proposed structure, and opportunity for expansion either by lengthening one or both wings or by completely enclosing the square will be possible, should future demands require it.

The building will be so placed that light from all sides can be permanently assured.

The children will enter the side door of the building from Forsyth Park and will assemble in the waiting room on basement floor (see plan), where clothing can be checked and toilet and mouth cleaning facilities will be provided. It is intended that the children shall have easy access to the park from the waiting room, since experience has taught that tedious waiting while they are compelled to sit primly on benches is more exhausting than the actual dental work.

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FUMENWAY

FORSYTH DENTAL INFIRMARY FOR CHILDREN

A W. Elson & Co, Boston

PLOT PLAN



## THE BUILDING

THE building is a direct expression of the requirements as given in a diagram prepared by the Trustees of the Institution. It consists of three stories and two partial mezzanine floors. The first floor is reached from the Fenway, which the building faces, by a central entrance leading from a broad marble terrace into a spacious vestibule ornamented by a floor of variegated tile and mosaic, by wainscot of marble and upper walls and ceiling richly treated in stucco ornamentation. From the entrance hall, the main staircase is in full view leading to the infirmary above.

The main staircase has been kept on the inside of the building with its length parallel to the main façade, that it should not encroach on the outside wall space of the infirmary, whence comes the most valuable light, and that the operating room, which is placed at the centre of the rear wall on first floor, should have proper connection with the recovery and anæsthetic rooms.

The main requirement of the infirmary is light, but the difficulty at a casual glance was how to combine sufficient window area with a good external effect, a window to each chair producing a monotonous repetition. So the façade of the building was divided into eleven bays 14'-6" on centres, giving two chairs to each window, the windows being 9'-0" wide by 13'-0" high. This window spacing, with slight variation, is carried all around the building. That the light should reach as far as possible into the room, lintel windows with their heads well towards the ceiling were required, and that the reveals should not be too deep suggested an order covering the upper story only. So, the uses of the building have, as they should, resulted in the architectural form that gives expression to the structure.

We have then a design following in both horizontal and vertical directions the divisions of the work which it covers, a

## THE BUILDING

composition which from point of view of historic style is in spirit Roman Classic. The plan is a U shape, the long side facing the Fenway and the Court side facing Hemenway Street. The main building is 168 feet long by 50 feet wide; the wings are each 35 by 30 feet. The first story is a simple rusticated wall resting on a basement, 7'-o" above the grade on the Fenway and Forsyth Park sides, and 13'-o" above the grade at rear and alley side.

The grade at rear 6'-o" below Hemenway Street is the natural grade of the land. The sunken garden at rear, together with the Forsyth Park Strip at side, is, as the Plot Plan shows, laid out in walks and passages, with fountains, balustrades,

cypress trees, and box hedges to beautify it.

#### MATERIAL

The working part of the building is to be done in the most simple and lasting hospital finish. The lecture hall, the founder's room, the permanent staff, and visiting dentists' rooms, the main staircase hall, and principal entrance are to be more attractively treated, to suit the purposes for which they serve.

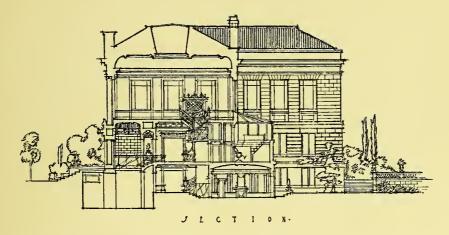
The exterior of the building is to be done in a more monumental manner than an infirmary might seem to require, first, because it is a memorial to the family which has so generously endowed the institution; secondly, because of its commanding site bordering one of the most important Parks of the City, and its proximity to the Art Museum and other monumental compositions, and thirdly, because it has been felt that a building fails in its purpose if by its proportions and color effect, it does not please.

The material will be either cut stone, white or Tennessee marble. The terraces and fountains will be carried out in similar materials, so that when completed, the grounds and building of the Forsyth Dental Infirmary will be another help towards making the Fenway District one of the most beautiful parts of Boston.

FORSYTH DENTAL INFIRMARY FOR CHILDREN

REAR VIEW





THE FORSYTH.

DENTAL INFIRMARY FOR CHILDREN.

JOHN HAMILTON FORSYTH AND THOMAS ALEXANDER FORSYTH.

DONORS.

## THE STAFF

Dental service will be supplied by a consulting staff; a visiting staff made up of dentists who volunteer their services, and a permanent staff of graduates, selected for their ability, who will devote all of their time to the work. Post-graduate courses will be offered.

Students of duly authorized Dental Schools under the immediate supervision of competent instructors will be permitted to assist in the work.

## THE BASEMENT FLOOR

THE left wing of this floor will be occupied by the general waiting room for children, with checking and toilet facilities. The end of the wing will be occupied in part by a stairway which children will ascend to the infirmary. The waiting room is accessible from the park and is well removed from the infirmary and the extracting rooms.

Children will be called in small groups to the waiting room on the infirmary floor, from which they will be promptly assigned to chairs.

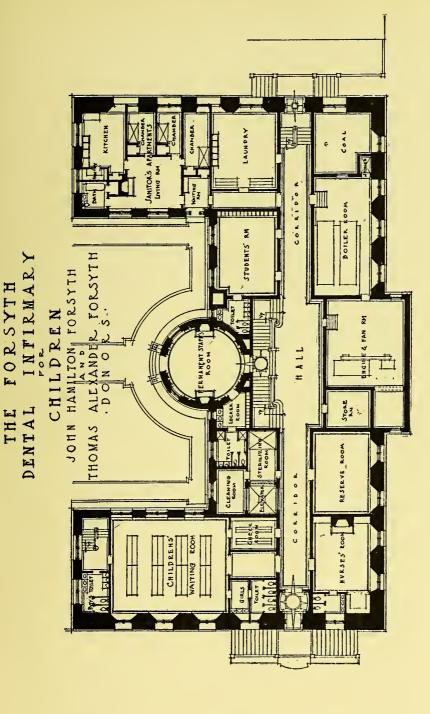
A room for nurses is set apart on the front of the building opposite the entrance of the waiting room.

The permanent staff will occupy the circular room under the amphitheatre with locker room and toilet and shower baths adjoining.

The students are given a retiring room on the rear which will be supplied with lockers and toilet facilities.

The elevator opens directly into the cleaning and sterilizing rooms. Sets of instruments will be cleaned, sharpened, and reassembled in the cleaning room and will then be placed on trucks which will be run directly into the sterilizer in sterilizing room. After sterilization is complete the trucks of sterile instruments will be returned by elevator to the supply room in infirmary.

The rest of this floor will be occupied by the janitor's apartments, laundry, boiler, engine and fan rooms, coal pocket, a small storeroom, and a reserve room.



FORSYTH

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## THE FIRST FLOOR

THE left wing will be occupied by a lecture room seating 250, which is intended to be used for popular lectures on dental hygiene. By means of a folding partition a portion of the room can be cut off for trustees meetings and for committee purposes.

The founders' room will occupy the northeast corner of the floor. Here will be assembled the memorials of the Forsyth

family and the library of Thomas A. Forsyth.

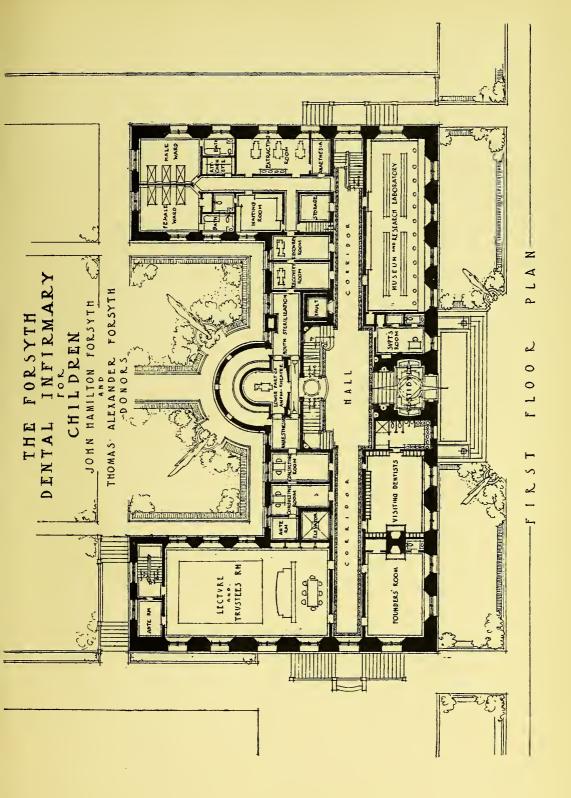
The next room on this front will shelter the visiting dentists and will be supplied with lockers, toilet facilities, and shower baths.

The northwest front of this floor is given up to the museum and research laboratory. As has been said, it is hoped that the museum will be a centre for the dissemination of information concerning dental pathology and hygiene. An invitation is hereby extended to the profession to send to the trustees dental publications and other material or information as to the availability of material which can be used for demonstration or instruction in oral hygiene.

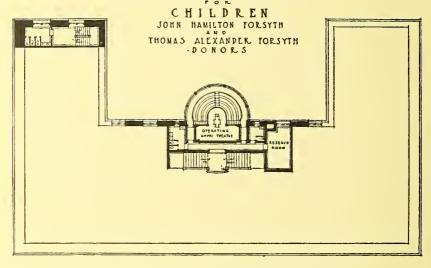
The right wing is to be used for extracting and anæsthesia rooms, with waiting room and male and female wards, each

containing three beds.

The rear of the central portion of the main floor will contain the lower part of the amphitheatre and the consulting, anæsthesia, mouth sterilizing, and recovery rooms related to it.



## THE FORSYTH DENTAL INFIRMARY



· MEZZANINE FLOOR PLAN.

## MEZZANINE FLOOR

THE upper part of the amphitheatre rises into the mezzanine floor, and access for students will be from above. The amphitheatre will be lighted wholly from above (side and roof) and seats are so arranged that as good a view of the operating field as possible may be obtained. Plans are under way to throw an enlarged image of the mouth undergoing examination and operation upon a screen so that all viewpoints will be equally good.

The mezzanine floor will also contain toilet and mouth cleaning rooms readily reached from the infirmary and yet not on the infirmary floor.

A reserve room which will probably be used for storage is also found here.

## THE INFIRMARY FLOOR

THE most vital work of the institution will be performed in the infirmary, about which as a nucleus and subservient to the requirements of which the rest of the building will be constructed.

#### LIGHTING

This, a most essential requirement, has been adequately provided for. Each chair in the front row has the advantage of a window 9 by 15 feet. The large windows come within three feet of the floor, thus bringing light directly on the field of operation in the mouth. The rear row of chairs will be lighted from the upper portions of the windows and from skylights admitting only north light. The room will be 27 feet high. The elevator and supply room will be enclosed by ornamental grills which will not extend to the ceiling, so that the lighting of the centre of the room will not be obstructed.

#### **CLEANLINESS**

The floor and wainscoting are to be constructed of waterproof material. The specially constructed operating chairs are also to have waterproof surfaces. All corners are to be eliminated. By this arrangement, hot water and steam can be applied freely enough to bring about a condition of absolute cleanliness.

#### **ASEPSIS**

A complete outfit of sterile instruments necessary for ordinary operations will be sent to each operator on call for each patient. These outfits will be contained in metal trays which can be mounted on the operating chair. When patients are dismissed the instruments and the metal trays containing

## THE INFIRMARY FLOOR

them will be collected in trucks, and taken to the cleansing and sterilizing rooms.

Cuspidors are to be removable from chairs. Cuspidors which have been used will be collected and replaced by clean ones.

Outer clothing will be excluded from the room. Operators as well as patients will be provided with coverings to go over ordinary clothing.

Numerous wash-stands of the hospital operating-room type will be placed at convenient points, so that one at least will be within easy access of each operator.

#### VENTILATION

The infirmary is to be heated by radiators between the windows and ventilated by humid air brought in beneath the windows by means of fans. Impure air will be taken out through the skylight.

#### ACCESSORY ROOMS

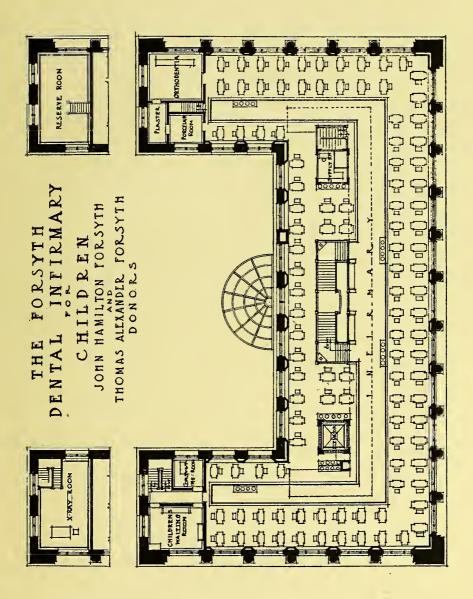
The end of the right wing has been set apart for an orthodontia laboratory, a room for plastic work, and a room for the manipulation of porcelain. Above these is a mezzanine floor with a large reserve room.

Waiting and consultation rooms are found at the end of the left wing, together with the stairway from the general waiting room below. Above these is a mezzanine room for X Ray purposes.

Adjoining the supply room is a stairway descending to the extracting room (vide infra).

#### **CHAIRS**

There will be 64 chairs in the outside row; 44 additional chairs can be accommodated in a second row. From base to base the chairs will be set 7 feet 3 inches apart. The second line of chairs will be 8 feet 6 inches from the first line. This



SECOND FLOOR PLAN

## THE INFIRMARY FLOOR

will afford ample room for each operator, and will give him a degree of privacy which the crowded floors of most dental clinics preclude.

Although most of the children coming to the infirmary for treatment will be in the custody of school nurses, their numbers will be so great that to care for them in the immediate vicinity of the operating room would be unwise. Consequently a special entrance from the park on the north has been provided. In the general waiting room in the basement accommodations for checking outer garments and making the necessary toilets are provided. The children can be amused and cared for, either in the large waiting room, or allowed to play in the park, as conditions permit.

When summoned, they will proceed in small squads to the waiting room at the head of the stairs in the left wing, for inspection. Here they will be assigned to the different departments. When treatment is completed, ordinary cases will return to the general waiting room to remain until taken home.

Children who require extractions or major operations will be treated in other parts of the building, and will leave by a special exit from the south wing.

In this way children recovering from an anæsthetic or nervous shock, or who are expectorating bleod, will not come into contact with those waiting for treatment. It is for this reason that the extracting room has been placed near the ward and recovery rooms and as far away from the waiting and operating rooms as possible.